## ABSTRACT

There is provided a process for the production of carbonyl compounds, characterized by reacting a diol represented by the formula (1);

$$\begin{array}{ccc}
R^1 & R^2 \\
HO & OH \\
R^3 & R^4
\end{array}$$
(1)

wherein  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are the same or different, and independently represent a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted acyl group, a substituted or unsubstituted alkoxycarbonyl group, a substituted or unsubstituted aryloxycarbonyl group, a aralkyloxycarbonyl unsubstituted substituted or carboxyl group or a hydrogen atom, or  $R^1$  and  $R^2$  or  $R^3$  and  $R^4$  are bonded together with the carbon atoms to which they are bonded to form a ring , provided that all of  $R^1$  ,  $R^2$  ,  $R^3$  and  $R^4$  are not hydrogen atoms simultaneously; with bromine or an inorganic bromine compound in the presence of a trivalent bismuth compound and a base to form carbonyl compounds represented by the formula (2);

$$R^1$$
 (2)

wherein  $R^1$  and  $R^3$  are as defined above; and the formula (3);

$$R^2$$
 o (3)

wherein R2 and R4 are as defined above.

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